

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/612,606	07/02/2003	Heinz-Juergen Dern	302.139	4791
47888	7590 10/06/2005	EXAMINER		INER
HEDMAN & COSTIGAN P.C. 1185 AVENUE OF THE AMERICAS			SALVATORE, LYNDA	
NEW YORK,		.5	ART UNIT	PAPER NUMBER
,			1771	

DATE MAILED: 10/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	^	. ]	<u>; il</u>			
Office Action Summary		Application No.	Applicant(s)			
		10/612,606	DERN ET AL.			
		Examiner	Art Unit			
		Lynda M. Salvatore	1771			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)⊠	Responsive to communication(s) filed on 19 July 2005.					
2a)⊠	This action is <b>FINAL</b> . 2b) ☐ This action is non-final.					
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) ☐ Claim(s) 10-15 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5) ☐ Claim(s) is/are allowed.  6) ☐ Claim(s) 10-15 is/are rejected.  7) ☐ Claim(s) is/are objected to.  8) ☐ Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
<ul> <li>9) The specification is objected to by the Examiner.</li> <li>10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).</li> <li>11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.</li> </ul>						
Priority (	under 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
2) Notice 3) Information	et(s) ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) or No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:				

Application/Control Number: 10/612,606 Page 2

Art Unit: 1771

### **DETAILED ACTION**

## Response to Amendment

1. Applicant's amendment and accompanying remarks filed 7/19/05 have been fully considered and entered. Claims 1-9 have been canceled and claim 10 has been amended as requested. Applicant's arguments with respect to the rejections set forth in sections 8-11 of the last Office Action have been found persuasive. Specifically, the prior art fails to teach a mixture comprising a thermoplastic binding agent and 1-15 wt % of fatty acid amides and/or substituted fatty acid amides having the formula set forth in claim 10. As such, these rejections are hereby withdrawn. However, despite this advance, Applicant's amendments are not found patentably distinguishable and upon further consideration of Applicant's amendments a new ground of rejection is set forth herein below.

## Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 10,12 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 1082236.

The published GB specification teaches producing an aqueous emulsion suitable for impregnating textile substrates (Column 1, 61-65). The emulsion comprises novolak (i.e., phenol-formaldehyde) or a mixture of cresol and phenol (Column 2, 63-63-80 and Column 3,45-50). Said resin is a thermo-hardening resin such that it hardens in the presence of heat (Column

Application/Control Number: 10/612,606

Art Unit: 1771

5, 1-10). With regard to the fatty acid amide limitation, the published specification teaches adding loosening agents and softeners such as stearamide or oleamide (column 4, 105-115).

With regard to the weight percent limitations set forth in claim 10, the published GB specification fails to teach how much fatty acid amide is added, however, it is the position of the Examiner that it would be obvious to one having ordinary skill in the art at the time the invention was made to add a suitable amount of fatty acid amide as a function of desired softness. It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233

4. Claims 11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 1082236 in view of Wernik et al., US 6,372,878.

The published GB specification does not specifically teach the claimed resol binding composition, however, the patent issued to Wernik et al., teaches a modified resol binding resin composition (Abstract and Column 1, 50-59). The aqueous solution may comprise various phenolic compounds used singularly or in a mixture (Column 2, 33-40). The resin solution further comprises an aldehyde such as formaldehyde (Column 2, 41-50). In addition the resol binding resin may be further combined and cured with other polymers such as melamine, epoxide or polyvinyl (Column 3, 50-56). Wernik et al., specifically teaches that the resol binding resin is suitable as an impregnation agent, or binders for grinding abrasives on substrates (Column 3, 58-67). Advantages of the modified resol binding resin include good water-dilutability and bright curing at elevated temperatures without chemical and/or physical degradation of the cured product (Column 1, 35-45).

Therefore, motivated by the desire to impregnate a textile with a binding agent which provides good water-dilutability and bright curing at elevated temperatures without chemical and/or physical degradation of the cured product, it would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the phenol based binder in the coating composition taught by the published GB specification with the modified resol binding resin taught by Wernik et al.

5. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over GB 1082236 in view of Baker, US 3,293,056.

The published GB teaches producing the binding composition by reacting in water and in the presence of a basic reacting substance, but fails to teach a binding solution dissolved in methanol. However, it is known in the art to dissolve resin materials in the claimed solvent. For example, the patent issued to Baker teaches preparing a resin composition by dissolving the resin in methanol to form a slurry (column 2, 4-51). Said resin composition is used to impregnate fabric material (column 2, 4-10)

Therefore, motivated to provide a binding composition suitable to impregnate fabric and/or textile materials it would have been obvious to one having ordinary skill in the art to prepare the binder composition taught by the published GB specification by dissolving the thermoplastic binder in methanol as taught by Baker.

#### Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Application/Control Number: 10/612,606 Page 5

Art Unit: 1771

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynda M. Salvatore whose telephone number is 571-272-1482. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

October 3, 2005

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700